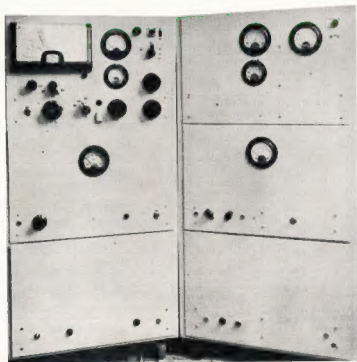


MAY, 1961



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EDITORIAL



MEMBERSHIP REMINDER

EVERY so often, at the risk of
belabouring the point, readers
are asked "Are you a member of
the Wireless Institute of Australia?"
Because you are not does not make
it mandatory that you should be, for
it is not the Institute's policy to
unlodge Amateurs in the sense "You
be a member or else."

Nevertheless, to the right thinking
Amateur, his hobby is available to
him because he is represented officially
by an organisation pledged to
speak for him and generally look
after his interests. Without repre-
sentation he would be battling up
hill to protect the frequency alloca-
tions used by the Amateur Service
all over the world.

When membership grows in an
organisation like ours, then better
facilities can be made available. The
W.I.A. already provides a technical
publication; up-to-date annual call
sign book; provides for QSL card
distribution to members; arranges
lectures, picture nights, social nights,
field days, contests, A.O.C.P. classes,
slow morse transmissions; it main-
tains liaison with the licensing
authority to bring about better con-
ditions for the Amateur as the art
dictates changes; liaison on a world-
wide basis is carried on with Amat-

eur Societies through the Interna-
tional Amateur Radio Union; branch-
es and zones are organised for the
Amateur who lives in the country;
affiliated clubs are also fostered and
encouraged to become part of the
W.I.A. organisation; disposals equip-
ment is made available to members
in the States of Commonwealth
where this is possible; a library of
technical publications is available
for the use of members.

All these things are available to
members, only because the W.I.A. is
an organisation with a purpose—to
look after the interests of the Amat-
eur Service in Australia and encour-
age young people to take up radio
as a hobby in the national interest.

This purpose can only be ex-
panded and maintained by member-
ship without which no organisation
can exist. If the W.I.A. did not exist,
you might not have an Amateur
license today. Give us your support
as an Amateur, a Short Wave Listen-
er or an interested party. You will
find the membership information
freely available upon application to
the Secretary of the W.I.A. Division
in your State.

Could we suggest you obtain a
membership form and join now?

FEDERAL EXECUTIVE

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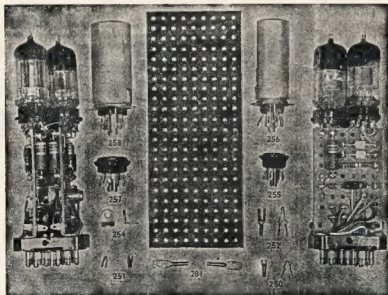
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A 72 Mc. V.F.O. FOR 144 Mc. DRIVE*

Using the Kalitron Circuit for High Stability

BY "OXO"

THE unit to be described is the outcome of a successful attempt to avoid any possibility of generating harmonics falling in Bands I. or III. of the television spectrum when transmitting on frequencies in the 144 Mc. Amateur band. Many arguments for and against v.f.o. control are heard, each of which has its points, but so far as the writer is concerned its use is confined to the convenience of shifting frequency in the event of another station operating on the chosen frequency.

In addition, by monitoring the band prior to switching on the transmitter, it can be set up on a clear channel, thus avoiding the necessity of purchasing a number of crystals in the hope of achieving the same result.

Finally, one has that sense of achievement which follows the design and construction of a v.f.o. for v.h.f. operation which is as stable as any of the lower frequency crystals used for controlling 144 Mc. transmitters and better than some of them, judging by reports from various stations on which the utmost reliance can be placed.

It seemed, therefore, that it would be better to start at some frequency which even at the worst would not produce a harmonic in television bands at all, and 72-73 Mc. was chosen for the following reasons:

- (a) No possibility of harmonics in band I.
- (b) No possibility of harmonics affecting i.f.s. of band I. or band III. receivers.
- (c) No possibility of a harmonic falling in band III. (Third harmonic above 216 Mc.)

The writer is indebted to G. W. Slack (G5KQ) for suggesting the basic circuit of an oscillator which is reputed to have a high degree of stability. It is a twin triode push-pull circuit, very reminiscent of the multivibrator, and glories in the title Kalitron. It comprises very few components and is one of those delightful circuits which function not only in "breadboard" form, but repeats the performance when re-engineered for final use.

CONSTRUCTION

The assembly is mounted rigidly in a copper box, one end of which has a coaxial socket to which is connected a loop lying parallel to the cold end of the anode tank and about $\frac{1}{4}$ " away from it. Details of the box are given in Figs. 2 and 3. The constructor may have other ideas on the design of a suitable box, but the one described was composed of odd pieces of material which happened to be available.

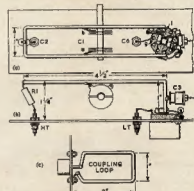


Fig. 3.—Diagram (a) shows a view of the underside of the top plate of the box, and (b) a side elevation. The coupling loop (c) is mounted approx. $\frac{1}{2}$ inch underneath the tuned circuit.

The various parts of the box are held together by PK self-tapping screws and the valve-holder, together with the feed-through by-pass capacitors, is mounted on the top plate (Fig. 3). All earth returns are made to this plate with the exception of the output link which is mounted on one end of the box as already described. The main point to bear in mind is rigid mounting of components with connecting wires

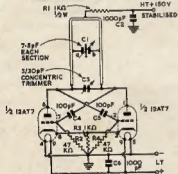


Fig. 1.—The circuit diagram of the
Kallitron v.f.o.

For the purposes outlined above a maximum change of 100 Kc. either way is all that is necessary. The oscillator does, however, enable the whole of the two metre band to be covered.

In passing it should be mentioned that, prior to the construction of this v.f.o. Clapp circuit with a fundamental frequency of 8 Mc. was in use which was in operation only when transmitting. This had one disadvantage, however, as with its attendant multipliers a harmonic reared its ugly head on 194 Mc. producing, of course, t.v.i. on Band III. The harmonic was suppressed to the satisfaction of the G.P.O. engineer but not to the complete satisfaction of the writer. A band III t.v. set working in the shack with transmitting and band III. aerials ten feet apart showed slight traces of cross hatching although it was not discernible on a television set next door.

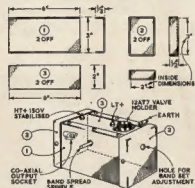


Fig. 2.—Details of the construction of the copper or brass box. The thickness of the material may lie between 16 and 22 a.w.g.

THE CIRCUIT

As will be seen from the circuit diagram (Fig. 1) the valve used in the prototype is a 12AT7. The cathodes are strapped and biased by a 1,000 ohm resistor which is not by-passed. This introduces negative feedback to assist stabilisation. The anode tank circuit comprises a hairpin loop of 10 s.w.g. silver-plated copper wire (part of an ex-Service inductance). The band-set capacitor is a Philips concentric trimmer of 3 to 30 pF. capacity and the bandspread capacitor a split-stator (also ex-Service) with two stator and two rotor plates in each section giving an approximate capacity of 7.5 pF. per section. The condenser is connected midway along the hairpin inductance. The rotor is not earthed.

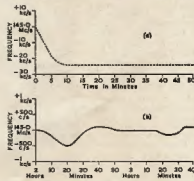


Fig. 4.—(a) Initial warm-up drift measured at 145 Mc. The ambient temperature varied between 65 and 70 degrees F. during the test. The h.t. supply was 150 volts stabilised by a VR150/30. (b) Variation in frequency after a two-hour run.

* Reprinted from R.S.G.R. "Bulletin," Sept. '38

as short as possible between these and valve-holder contacts, etc.

The assembly of the items on the top plate is first completed, together with the bandspread capacitor. One side of the box is then fitted and the fixing screws inserted to fix the end plate of the capacitor. Then the base and re-

The maximum deviation is minus 500 cycles with no tendency to depart permanently from the set frequency, and could well have been due to slight variations in the voltage of the h.t. supply. In both instances the measurements were made on the second harmonic of the oscillator at 145 Mc.

BUFFER AMPLIFIER

The 72 Mc. oscillator is followed by a two-stage buffer amplifier. Mullard EF50s were used in the original but the constructor may use other types depending on the valves available. With 150 volts stabilised h.t. at 4 mA. on the v.f.o. and 285 volts at 20 mA. on the buffer stages, a drive of 3 mA. is available at the grid of a 5763, which is used as a doubler to 144 Mc.

The buffer amplifier follows normal practice for v.h.f. amplification and the actual circuit in use is shown in Fig. 5, together with a component layout sketch in Fig. 6. The frequency of the oscillator may be changed by at least 100 Kc. in either direction without necessitating retuning of the buffer circuits or loss of drive, but greater changes will call for readjustment of the tuned circuits of the amplifier. This slight disadvantage could, no doubt, be overcome by adding a further buffer amplifier stage and broad banding all tuned circuits but was not thought necessary for the writer's requirements.

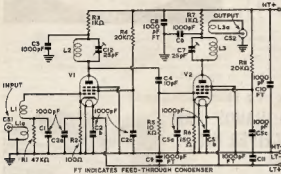


Fig. 5—Circuit diagram of the buffer amplifier for use with the 72 Mc. Kallitron v.f.o. V1 and V2 are both EF50s. The physical layout used by the writer is shown in Fig. 6. The oscillator is connected to this unit by a short length of coaxial cable.

maining side and the ends are attached and the job is complete.

The connection for the h.t. negative and earthed side of the heater supply goes to a tag under one of the screws fixing the valve-holder, which should be p.t.f.e. for optimum results. A screening can be provided for the valve.

A slow motion drive will be required and it is recommended that this be coupled to the bandspread condenser by means of a flexible coupling.

FREQUENCY STABILITY

Some idea of the order of frequency stability to be expected from the oscillator is given by the graphs in Fig. 4, from which it will be seen that (graph a) the frequency remained substantially constant after rather less than ten minutes from a cold start, i.e. and h.t. having been applied together 20 seconds before observations commenced.

Graph (b), drawn to a much larger scale, shows the random variations in frequency noted during a period of one hour 45 minutes after the oscillator had been in operation for two hours.

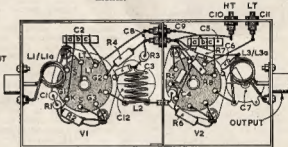
METEOR SHOWERS

For the information of those Amateurs interested in communication from meteor scatter propagation, we publish the names of the meteor showers and their times of occurrence during the year:

Quadrantids	Jan. 1-4
Cygnids	Jan. 17
Aurigids	Feb. 5-10
Boötids	March 10-12
Lyrids	April 19-22
May Aquarids	May 1-5
Mercurids	May 11-30
Pegassids	May 30
Scorpiids	June 3-4
Pons-Winnecke	June 27-30
Cygnids	July 14
Capricornids	July 18-30
Perseids	July 25-Aug. 4
Aquarids	July 28-31
Perseids	Aug. 10-14
Aurigids	Aug. 18-20
Dracoides	Aug. 21-31
Perseids	Sept. 7-15
Aurigids	Sept. 22
Quadrantids	Oct. 5
Giacobinids	Oct. 9
Arietids	Oct. 12-25
Orionids	Oct. 18-25
Taurids	Oct. 31-Nov. 4
Leonids	Nov. 14-18
Andromedids	Nov. 28-Dec. 4
Geminids	Dec. 10-13

The above information was taken from a lecture given to the VK3 V.H.L. Group by VECARY.

Fig. 6—Layout of the INPUT buffer amplifier. The copper or brass chassis measures 5 in. by 3 in. and has a bottom cover plate.



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"APACHE" HAM TRANSMITTER KIT (TX-1)

Packed with special features. Allows phone or c.w. operation on 80 through 10 metres. Built-in v.f.o., modulator and power supply. Features

150 watt phone input and 180 watt c.w. input in addition to single-sideband adaptability. Adjustable low level speech clipping, time sequence keying for "chirpless" break-in c.w. operation, spotting push button for zero-beating incoming signals without going on the air. The final amplifier is completely shielded for t.v.i. protection. Pi network output coupling matches antenna impedances between 50 and 72 ohms. The final amplifier uses a pair of 6CA7/EL34 tubes. Operates from 115v. a.c., 50/60 cycles. Size 19½" w. x 11½" h. x 16" d. Price £269.

"MOHAWK" HAM RECEIVER KIT (RX-1)

This "de luxe" 15 tube communications receiver features double conversion with i.f.s. at 1682 kc. and 50 kc. Eight separately calibrated bands

cover all Amateur Radio frequencies from 160 through 10 metres plus the 11 metre citizens band and a converter band calibrated for 5 and 2 metres. Provides single-sideband reception with crystal controlled oscillators. Five selectivity positions from 5 kc. to 500 c.p.s. bridged T-notch filter for excellent heterodyne rejection and built-in 100 kc. crystal calibrator are featured. The "Mohawk" provides a 10 db. signal-to-noise ratio at less than 1 microvolt input. Pre-assembled, wired, and aligned "front-end" coil/bandswitch assembly. Operates from 117v. a.c., 50/60 cycles. Size: 19½" w. x 11½" h. x 16" d. Price £310/5/-.



Low cost phone/c.w. Transmitter

HEATHKIT DX40 PHONE/C.W. TRANSMITTER KIT

An outstanding buy in its power class, the DX40 provides both phone and c.w. operation on 80 through 10 metres.

Specifications:

Power input 75w. c.w., 60w. peak controlled carrier phone
Output impedance 50 to 600 ohms (non-reactive)
Output coupling Pi network
Operation Crystal-v.f.o., c.w., phone
Band coverage 80, 40, 20, 15, and 10 metres
Tube complement 5U4GB rectifier, 12AX7 speech amplifier, 6DE7 controlled carrier, modulator; 6CL6 crystal oscillator, 6CL6 buffer, 6146 final amplifier.
Power requirements 117 volts a.c., 60 cycles, 175 watts
Cabinet size 13" w. x 8½" h. x 9" d.
Price £12/16/-.



HEATHKIT BALUN COIL KIT (B-1)

Match unbalanced co-axial lines, found on most modern transmitters, to balanced lines of either 75 or 300 ohms impedance with this convenient transmitter accessory. Capable of handling power input up to 200 watts, the B-1 may be used with transmitters and receivers covering 80 through 10 metres. No adjustments required. Cabinet measures 9" square x 5" deep. The unit may be located any distance from the transmitter or antenna, wherever convenient. Wgt. 5½ lb. Price £10/1/0

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MODULATOR DESIGN

(Continued from Page 3)

NOTES

It should be noted that the OC26 output transistors employed have a frequency cut off of 4.5 kc. The phase shift and drop in a_v gives rise to a decline in transistor efficiency which causes an elevation of junction temperature. To help stabilise this run-away condition at the higher frequencies, a base leak of 12 K ohms has been used with the OC26s. Nevertheless, when checking for maximum power output at frequencies above 1 mc. a current meter should be inserted in series with the supply for visual indication of run-away, and drive power only applied for a brief period.

There is not sufficient sustained high frequency power in normal speech to precipitate this form of instability and hence the performance of the modulator does not suffer as the power level in speech (even female) declines rapidly as the frequency increases above some 800 c.p.s. Similarly, the response of the carbon microphone falls rapidly above 2.5 kc. Nevertheless, as an added precaution when testing the modulator, an 0.47 μ F. condenser in parallel with the 50 ohm source impedance audio generator is recommended to synthesise the high frequency roll-off of the microphone.

After construction, the unit should be tested for proper operation by connecting a dummy load to the output of the modulation transformer and checking the variation whilst speaking into the microphone. Do not, under any circumstances, try to operate the unit without a load, as this may damage the output transistors. A modulation percentage test may be made when the modulator has been connected to the transmitter.

It is desirable to use an oscilloscope for this purpose in order to achieve the optimum setting for the pre-set volume control.

FOOTNOTE BY EDITOR

(In constructing a similar modulator it is suggested that the OC26 transistors be mounted on a heat sink of 16 gauge aluminium and at least 6" x 3" in size. The transistors require to be insulated from the heat sink using the mica washers and other mounting parts supplied.

Transformers suitable for the modulator are being manufactured by A. & B. Electronic Equipment Pty. Ltd., of Melbourne, and can be procured through their Distributors in all States.

The input transformer, Type IT631, is designed for use with a carbon microphone, the impedance of the primary being 50 ohms and secondary 1,500 ohms c.t. The core material is "Alphasil" grain oriented steel.

The modulation transformer, Type MT26, is provided with a 120 ohm c.t. primary and a secondary of 7,000 ohms, tapped at 4,000 ohms. This allows for typical operating conditions such as:

Input to r.f. amplifier stage—
300 V., 75 mA., 22.5 W., 4,000 ohms.
320 V., 80 mA., 25.2 W., 4,000 ohms.
400 V., 57.5 mA., 23 W., 7,000 ohms.
420 V., 60 mA., 25.2 W., 7,000 ohms.

This transformer also incorporates a grain oriented core.—Editor.]

A V.F.O. FOR 9 Mc. S.S.B.

The author of this article, which appeared in Feb. '61 "A.R." points out that the output circuit of the second 1625 tube can be much simplified, as shown in Fig. 1.

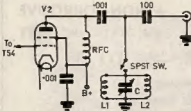


Fig. 1.

L1 tunes 18 to 20 Mc. (for 7 and 28 Mc.)
L2 tunes 12 Mc. for 21 Mc.)

For 3.5 and 14 Mc. operation, the switch is opened and 5 Mc. output is fed straight through—giving 9 Mc. s.s.b. minus 5.5 Mc., equals 3.5 Mc.; or 9 Mc. s.s.b. plus 5.5 Mc. equals 14.5 Mc.

For the other three bands close the switch and the capacitor, C, peaks the appropriate coil.

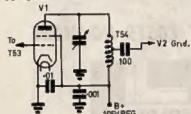


Fig. 2.

Unfortunately an error appears in the circuit shown at the bottom of page 5, Feb. '61 "A.R." The condensers C65 and C67 are grounded in the transmitter, so the circuit should be as shown in Fig. 2 herewith.

AMATEUR IN EXILE

Out in the garage, or under the short leg of the kitchen table, or gathering dust on top of the transmitter rack, have you a copy of "Call Book Magazine" published in 1936, 1937, 1938, or 1939? If so, would you like to gladden the heart of an ex-SP? W. Nestorowicz, ex-SP1EG, would just about give his right arm to see in print the old call sign. You can contact him at 46 Rabaul Road, George's Hall, via Bankstown, N.S.W.

★

COMMONWEALTH TECHNICAL TRAINING WEEK

The Amateurs of Canterbury (England) are operating an Amateur Station during Commonwealth Technical Training Week (May 31 to June 3, 1961) and have requested, through the R.A.A.F. Radio Apprentice School, "Frogna", Canterbury (Victoria), for Australian Amateur Stations in the Canterbury (Melbourne) area to look out for the G station.

Commonwealth Technical Training Week is organising a technical hobbies exhibition in Canterbury (England) and the following G calls will be transmitting from the Amateur station at the exhibition site: G2QT, G3FUN, G3HTU and G2LIG.

Mr. D. J. Bradford, Secretary to the Exhibition Committee and himself a Bachelor of Science, informs us that 15 and 20 metres, between the hours of 0800 and 1100 GMT, would seem the most likely period for making contacts with VK3s.

Mr. Bradford has been advised that there is also a Canterbury in Sydney, so VK3 please take note and look out for the G calls listed above.

Apart from the desire to make contact with "Canterbury Hams," the exhibition station will be pleased to contact any VK Amateurs.

★

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"Call Book Magazine": Recent back numbers. In near-new condition, of the great American directory of Hams, at about one-third normal price. Copies on hand at present cover K and W call areas only. £1. Apply Federal Treasurer, Bob Boase, VK3NIT, 68 Franklin Street, Melbourne.

FOR THE S.S.B. ENTHUSIAST

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ARS5 comprises the following: 12AT7 audio, 12AU7 driver to "Aswel" audio p.s.n., 12AU7 xtal oscillator, 12AT7 audio amp., 2 x 6AL5 diode B./Modulators, 6BA6 Class A output stage.

ARS5A: Similar to above except that a 6BE6 mixer stage is included in place of the 6BA6 linear, switchband 80-10 mx.

Both units feature Selectable Sidebands and P.M. positions.

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PREDICTION CHART, MAY '61

Me.	E. AUSTRALIA—W. EUROPE S.E.	Me.
0	2 4 6 8 10 12 14 16 18 20 22 24	45
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Me.	E. AUSTRALIA—W. EUROPE L.R.	Me.
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Me.	E. AUSTRALIA—FAR EAST	Me.
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Me.	W. AUSTRALIA—W. EUROPE	Me.
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Me.	W. AUSTRALIA—N.W. U.S.A.	Me.
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Me.	W. AUSTRALIA—N.E. U.S.A.	Me.
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Vol Molesworth, VK2VO

THERE'S an old gag in Amateur Radio—"The gear looks an awful mess, but it works". A rather different approach is adopted by Vol Molesworth, VK2VO. He says his equipment looks good, even if it does not work very well.

Judging by the S9 signals Vol puts out on 40 and 2 metres, this is obviously a joke; but there is no doubt his shack has a "studio" appearance.

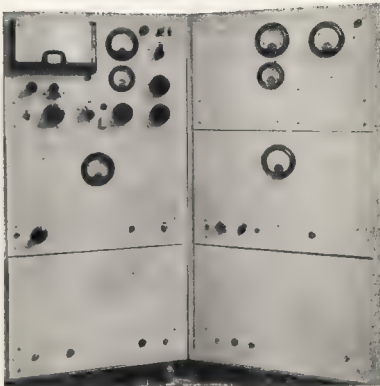
Vol lives in a three-story house in Jersey Road, Woollahra, in the eastern suburbs of Sydney. The whole of the top floor is devoted to his two main interests—study and radio.

One room is lined with books and is furnished with a couch, armchair, and desk. The other room is the "shack". It is painted out in duck-egg blue, with a canyon rose ceiling.

Along one wall runs the workbench, with pegboard backing to which tools and meters are conveniently clipped, and drawers below for storing components.

Along the other wall runs the storage and operating bench. This is masonite topped, and features doors each painted a different colour.

A photograph shows the "operating" end of this bench. Main receiver is an AMR300, on top of which sits the 2 metre converter and an 8" speaker. On the right of the receiver is a compass indicator and push buttons for remote control of the rotatable four-element 2 metre beam; on the left is a small 18½ watt 2 metre transmitter.



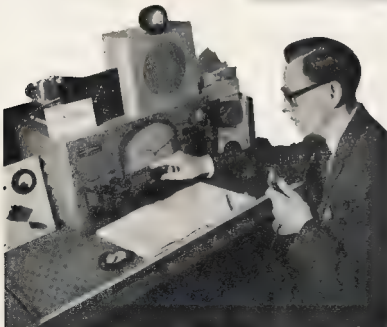
The two main transmitters, shown in the other photograph, are built in identical cabinets, with rubber feet for easy manoeuvrability. Each cabinet contains three compartments, the 18" x 12" front panels being sprayed grey.

On the left is the lower-bands transmitter, with a Gelo six-band exciter driving an 807 buffer, driving a pair of 807s in parallel. Pi-coupled output is used to centre-fed dipoles on 40 or 20 metres. The centre compartment houses the modulator (a pair of 807s in AB2) and the lower one the power supplies.

On the right is the high-power 2 metre transmitter, crystal-locked, running a QQE06/40 with 75 volts of fixed bias. Beneath it is a modulator running a pair of 807s in AB1, with in-built tone oscillator, and on the bottom the power supplies.

Vol entered Amateur Radio in 1959 by way of the correspondence course offered by the N.S.W. Division of the W.I.A. After three months as VK2ZDD, he took out the full call sign.

A newspaperman for 20 years, Vol is now Publications Officer for the Electricity Commission of N.S.W. He holds a Master of Arts degree (in Logic) from the University of Sydney, and is a Councillor for VK2 Division.



THE NORTH COAST AND TABLELANDS (N.S.W.) ZONE CONVENTION

URUNGA, 1961

The thirteenth Annual N.C. & T. Zone Convention was held at Urunga during Easter week-end and was attended by 37 licensed Amateurs, six associates, and 14 XYLS, whilst several Amateurs passing through Urunga spent a few hours with us.

Notable among the visitors was our Divisional President, Bill 2YB and Councillor, Harold 2AAH. Don 3ALQ from Melbourne was again present, and Claude 4UX from Ayr paid a second visit and was accompanied by 4ZDG.

The full attendance list was as follows: Rod 2ACU, Noel 2AHH, Assoc. Norm Dash, Hugo 2WH and Jean, Don 2ASW, Graham 2ARR, Bob 2IN and Daphne, George 4GG, Claude 4UX, Bill 2AEY, Tas, 2GV, Col. 2ACK and Beryl, Ern 2FP and Muriel, Assoc. Norm Moody, Les 2RJ and Sylvia, John 2ATI, Dale 4ZDG, Frank 2ACQ/F and Ethel, Bill 4WS and Hazel, Bob 2WQ, Assoc. Snow McCauley, Bob 2AFP, Major 2RU and Ruth, Bill 2XT, Ian 2AXI and Gillian, Rupert 2AUK and Loretta, Crieff 2XO and Jean, Lionel 2LS, Terry 2JS and Elsa, Brian 2ZCQ, Assoc. Fred Reid, Bill 2YB and Verna, Harold 2AAH, Jim 2PH and Edith, John 2ZBM, Ray 2SB, Mac 2ADV, Ken 2PY, Chris 2QS, Don 3ALQ, Norm Bartlett, Assoc. Dave Harding, Jack 2ADN.

The Convention commenced on the Friday night with a meeting chaired by the Zone Officer, 2AHH, who outlined the programme and then invited questions and discussions on subjects concerning the W.I.A. or Amateur Radio in general. Divisional President, Bill Lewis, answered a barrage of questions of various subjects including disposals, the Dural equipment, 14 Atcheson Street, and general policy matters, whilst Councillor Harold Burtoft gave an interesting address on transistors and outlined proposals for produced tapes and slides for use by country members.

It was very pleasing to have Bill and Harold present, for as the Convention is a W.I.A. function, it gave members an opportunity of discussing their various problems with them at first hand.

Even though the Convention is a regular W.I.A. function, and one may reasonably expect the Council to be represented, it was very pleasing to see Bill and Harold present, for besides enjoying their company, it gave members an opportunity of discussing Institute affairs at first hand with two of the seven charged with the management of our organisation. We trust they have returned to Sydney with a better knowledge of the requirements of country members, or perhaps judging by some of the remarks on Friday night, they may be more confused than ever, hi!

It is very difficult to recapitulate and put on paper the "atmosphere" of the Convention without writing a book.

Suffice it to say that everyone had a good time and will be coming next year if they are able. If you want to find out about the "doings," I suggest you talk it over with someone who attended. Ask about the demonstration of recording equipment by 2ARR—especially the "stutter" machine; ask 2SB what happened to the 3-ton truck he took up to his first floor flat in Kings Cross; ask Rod Pike where he spent Sunday night; ask Ruth Collett (XYL VK2RU) to take you for a row sometime. I could mention dozens of incidents but space just will not permit me.

The winners of the various competitions were presented with the prizes at a concert in the Urunga School of Arts Hall, after which the Progress Association provided an excellent supper. A sale of disposals equipment followed, and the evening concluded around the output end of a 9-gallon wave-guide.

Competition results were as follows:

144 Mc. Hidden Tx Hunt: 1st, Major VK2RU; 2nd, Noel VK2AHH.

Gerry Challenger 7 Mc. Hidden Tx: 1st, VK2PY, only one to arrive.

144 Mc. Hidden Tx: 1st, Les VK2RJ; 2nd, Noel VK2AHH.

Urunga Scramble: 1st, Don VK3ALQ; 2nd, Noel VK2AHH.

Longest Distance Travelled: Claude VK4UX.

Boat Race for Ladies: 1st, Mrs. VK-2PM; 2nd, Mrs. VK2RU.

Raffle: Transistors, VK2IN; Book, VK-2WH.

No Convention can possibly function without organisation and work by many people. Rod VK2ACU was the organiser and he was ably assisted by Crieff VK2XO, Brian VK2ZCQ, Fred Reid (Assoc.), and Jack VK2ADN, whilst Assoc. Norm Dash acted as Convention Registrar-Treasurer-Secretary, etc. Not to be forgotten are the efforts of Jean Retailick (XYL VK2XO) and Betty Pike (XYL VK2ACU) who did so much to entertain the ladies and among other jobs such as supper on the Saturday night. Thanks are also due to many local people and organisations for the co-operation they always readily extend to us.

The Urunga Go-Kart Club was good enough to allow us to drive their karts and what a sight it was! They tell me Bill Lewis is going to hand in his driver's license after his experience on the go-karts!

Our thanks are also due to the Ducon Condenser Co. for making samples of their products available to members.

The Urunga Convention next year will be bigger and better than ever before, so keep your eye on these pages and your ear on VK2WI for further news.

—N. A. Hanson, VK2AHH, Zone Officer

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Spot Frequency Crystals
Prices on Application.

Regrinds £1/10/0

MAXWELL HOWDEN

15 CLAREMONT CRES.,
CANTERBURY, E.7,
VICTORIA

HE

Dave Tanner, VK3AAU
C/o. British Nylon Spinners,
Bayswater, Victoria.

V.h.f. activity these days as far as I'm concerned, only takes up a small amount of time on the air, but it is a pleasant surprise. Listening to various bands and writing of letters takes place. I have been conviving with a gent in VK4, one 4BZ, discussing various aspects of our hobby, and in particular the Ross Hull Contest. It would appear that at least the VK4s and VK4s are very much in agreement on most of the points of dissatisfaction about it. The VK4 boys have forwarded some ideas to the F.C.C. for their digestion and this, combined with efforts of G4V, could very well prove the basis of much more widespread interest in the Contest. I hope my friend 3ZPQ will print the VK4 ideas when he can find the space.

Another dragon which rears its head is c.w. There appears to be a revival of the use of this ancient art. It might be an idea if some of the old-timers with full calls got themselves a bit of practice before they are embarrassed by some of the ex-2's calls who still frequent the v.h.f. bands. I can now send c.w. on the mobile s.b. rig on 2 m., so if anyone wants some practice just let me know.

One of the sections of the Amateur Code is "An Amateur is prohibited from using his station for any purpose other than that for which he is not ahead of the present state of the art and not use decadent techniques. An example of this is a recent contact between 3CB and 3ALZ on 255 Mc. The distance is about 8 miles across town. The rx at 3ALZ was a crystal locked converter of modern design fed from a 18 ft. long yagi. The tx at 3CB was a slightly modified 533 with the final 332A tripler delivering about 2 watts to a ground-plane in the shape of a single 18 ft. yagi. The 332A should serve to illustrate the effectiveness of stable equipment compared with the mod. osc. super-regen. combination. By the way, if anyone is interested in the use of a 332A to either 3CB or myself will produce the necessary dope to occupy you for a half evening fall.

Getting back to the 533, it is interesting to note the specifications of the 533 rx in the article by 3ACV. In particular, I would like to compare its performance with a good converter using say a 5BQ7 or 8C97. The 533 has a sensitivity of 2 to 3 μ V for a 10 db S/N ratio. A converter for a similar S/N ratio has a sensitivity of 0.2 to 0.5 μ V. From this you can see that an 88 sig on the good converter would be about 33 on a 533 rx. You can see its limitations for weak signal work.

To find out what the other fellow has achieved, we would like to start a distance and DX contest about 1st May. We would like to know what number of countries you have worked, for 2 m. and above we would like the best distance you have worked and also number of states. I will put them in when I get enough.

VICTORIA

The March meeting of the V.H.f. Group was held on 15th. It got away to a flying start. 3ZCO Secretary illustrated the V.H.f. 3ZPQ on his DX-pedition to Alice Springs. It was unfortunate that the conditions at the time were poor, but Kel hopes to repeat the venture next year and provide VK3 with some more of the boys on 8 m.

The meeting then elected new office-bearers for 1961. They were Len 3ZGP, President; John 3ZCO, Secretary; Illustrated, Pres. 3ZPQ on his DX-pedition to Alice Springs. It was unfortunate that the conditions at the time were poor, but Kel hopes to repeat the venture next year and provide VK3 with some more of the boys on 8 m.

So Mo.—DX was totally lacking during March. Even local activity has been at a low ebb. A great deal of time has been taken up by the tv allocations, but it appears that we

have 80 and 144 back on our grip again due to a reshuffle of l.v. frequencies. The Easter week produced some out-of-band signals and at least 3AZV worked several JAs on 144 Mcs.—A project aimed eventually at contacting VK4s has been conceived by Peter 3ZDO and moves toward better converters, more powerful amplifiers, and larger antennas have already started. 3AW is still making appearances, but a high noise level at his GTH stops him from hearing all he would like to.

388 Mc. Activity on this band is relatively quiet, the prime movers are still pushing signals in various directions to those interested. 3C3 in Nagambie and others in that area are building crystal controlled equipment and a crystal converter of 3ALZ has been working. More were ordered prior to being sent to 3C3. 3AEL is constructing a sideband rig for 388 and apparently has a small amount of energy on that band. A small amount of autonomy appears to exist between the mod. osc. coils and the crystal controlled boys.

376 Mc.—Tests took place on Easter Sunday between 3QO and 3AUX/P at Carus Lookout, Geelong. Due to unknown reasons, 3AUX/P halting 3QO's tx, the test was terminated. 3ALZ is building a crystal controlled converter and band, but no further news in that direction.—3ZGP.

MIDLANDS

Contrary to popular opinion, this is not a DX paradise, not at present anyway. The JAs have been few and far between, the signals are not very strong, and only a few have been workable on phones. However, c.w. is the preferred mode of operation under these conditions and the local boys are doing QSO with a JA. Easter Friday I worked five, three of which were on c.w. around 3-3.30. JAT, 8 and JAI-3 also audible. Russian tx signals about 35 Hz below 3.30 Mc. were heard Saturday week JAI, JAS, worked one on c.w. Sunday about the same. Monday night, however, the Pacific Island stations along the band were really thumping in, but nothing on the Ham band. They have been in pretty frequently at night from about 1930 to 1950 hrs., but so far nothing has been heard from them as it's midnight there.

However, with the lack of DX on the band there has come a little lethargy and it's nearly getting to the stage where there will be a risk of getting a contact. Eastern 444s on the band. 4ZEL and 4ZEX, while 4ZALX has returned from VK5 and should be on the air soon. 4ZCN from extended holidays in VK3 and is now active on 6 and 3 m. 4ZCH at Ipswich is pretty active on 8, working into Brisbane on most nights when there is activity. 4ZPZ from the north coast are occasionally audible at good strength when coastal tropospheric conditions are better than the local.

4ZCX on the south coast comes on at times when work and conditions permit. 4ZBZ working on 3 m. gear, but is having trouble with a long yagi. 4ZAP hopes to be back on 8 soon from a new GTH, also talking of mobiles. 4ZDV heard frequently from high spots mobile with female voice in the background. 4ZLS active on both 6 and 3 m. 4ZNS 9 band element beam up and is very active. 4ZAA returned after temporary absence. 4ZBT more this time.

It looks like we'll have to scare up some DX somehow, we can't let the local tv. viewers get complacent about their l.v. due to inactive DX.

Very good news on the band allocations, maybe F.E. are not so bad after all and I will get down to work on the 3 m. band. It has taken a long time, but I do believe it is only because of the amount of work the v.h.f. boys have put into it that we've managed to get the good—viva is 50 Mc. and 144 Mc.—4BZ.

SOUTH AUSTRALIA

30 Mc.—No DX has been worked on 30 Mc. this month, however conditions may be changing as Graham 3ZAP heard a JAY on Good Friday at Angaston. He gave a call on his mobile but the JA did not answer.

On the 12th a Scramble was held and Garry 3ZFM distinguished himself by winning all three. A second series of Scrambles was held on 2nd and 4th April. The first was won by 3ZFM, officiated as M.C. Result was 5BQ first in the first event, Eric 3ZDQ first in the second event. Don 3ZDQ was runner up in both.

Amongst the competitors was Al 3ZCR stationary-mobile. The monthly Fox Hunt was held on 19th with 3BQ 3 m. gear and 3ZPQ 3 m. gear. 6 m. fox. Four events were held under excellent weather conditions and the last two were won by 3BQ. The winner was 3BQ, everyone managed to locate it. Winners of the var-

ious events were Garry 3ZFM, Keith 3MT, Graham 3ZAP and Mick 3ZDR.

Local activity is fairly constant at the moment. Most of the time there is a steady flow of his two-letter call has migrated to 30 m. to do battle with the DX on that band. No doubt he will continue to receive the notice of our local and national friends.

Eric 3ZDQ has been heard testing his new mobile on the bench and should be working soon. He has been using a new rig and Garry 3ZFM has been active on 6 and 3 m. mobile, and has a fine signal.

A picnic for the V.H.f. Group was held on 12th and several mobiles, including Ron 3ZDG from Whyalla, drove to Sellicks Beach for the occasion. Unfortunately the Mobile was not available, but there was much activity. In view of the fact the weather was rather poor.

144 Mc.—Two m. DX has been good at times and Garry 3ZFM has been in close touch with developments, some notes extracted from his log should be of interest. On March 8, Garry worked JNN, 3AW and 3ZCR at Mt. Gambier, and was heard by Ron 3ZCR at Mt. Buninyon, Victoria. From Mt. Lofy he worked Herb 3ZNN on the 13th, later in the evening he worked 3ZPQ on 144 Mc. and 3ZBZ on 144 Mc. He also worked David 3AW and could not make contact with him. Keith 3MT has worked into VK3 regularly also, and from his home location also into VK3.

No contact has been made with Hughie 3BC since March 13, also skeds have been made since the middle of Feb. On the 13th, 3ZFM worked 3BQ on 144 Mc. and 3BQ on 144 Mc. and worked 3ZNN. Attempts failed to work 3AW and 3ZCR although they were heard. The 13th was the last of the season of a v.h.f. expedition and barbecue on Easter Sunday. Two m. skeds were made with 3AW on 60 m. but contact with him was not possible. On the 14th, 3ZFM worked 3BQ on 144 Mc. and 3BQ on 144 Mc. and 3ZCR. Garry 3ZFM and your scribe and KYL. Neil 3ZAW has recently installed a new 10 m. antenna and is now active on 10 m. and 3 m. 3ZCJ has been active on 3 and has worked 3BC, so as the activity is now on the increase, all we want are the openings.—3BQ.

WESTERN AUSTRALIA

[The following, although not official Western Australian Division, W.I.A., notes, is published for the interest of our readers.]

The V.H.f. Group held its meeting on 27th March and there was a very good attendance. The lecture for the night was given by Cedric 3ZEL, entitled "Security of the Ham Radio". Cedric gave some simple means of fixing up all those meters which have taken some hard treatment to allow a better reading, most of you simply consider the hairpinning. Listen to a little and resolve.

The fox hunt on 144 Mc. was held on Mar. 12. The force being 3BQ and 3ZPQ. A number of cars took part and they explored several spots before arriving at the right one. Apparently the very good reflections were taking place. The fox was not seen, but was running.

Roy ex-4ZBZ eventually received confirmation that he passed the c.w. and is now 3RY. He has been working on 3 m. and 3 m. and is contesting the c.w. at the next exam and some m.c.w. has been heard on 80 m. between 3RY and 3ZBQ. Many reports of appreciation have been received from the c.w. and the practice has only to ask. Gordon ex-3ZEL has now been given the call sign 3ZDA and reports that he is having a splendid season as his year has arrived from the 1st.

30 Mc.—It would appear that the band is going to give us some DX, as during the month the stations building and testing are appearing and also HJKA has appeared up to 58 during the Easter week-end. One JA was heard, but no contacts made.

3 m.—The 3 m. skeds have been going on with regularity and varying results. Other activity has been much better with several stations building and testing are appearing and also HJKA has appeared up to 58 during the Easter week-end. One JA was heard, but no contacts made.

3BQ Mc. Quite a lot of activity has been going on on this band with 3HIX, 3ZDS, 3ZAA, 3WJ, 3BO, 3ZAS and not forgetting 3ZCB because he is most active with c.w. converters and 3's being used.

3W Mc.—Rud 3ZDS and Wally 3ZAA have been working with the 3 m. skeds and have had contacts over a few miles using phone each way.

Another item of interest was a trip to Cape Mervin during the Easter week-end. Kevin 3ZCB and Stan 3ZAS. They carried out checks on 50, 144 and 258 Mc. over the distance of approx. 160 miles. The 90 Mc. signals were a little time consuming, however.

(Continued on Page 18)

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FT 2070	L 3800	FT 4785	L 5551.5	FT 6125	LP 6547	FT 7425	
FT 2075	FT 3850	FT 4780	FT 5552.5	LP 6130	DC 6550	LP 7450	
2085	FT 3840	FT 4815	DC 5590	FT 6173.33	DC 6561	FT 7611	
DC 2092.25	FT 3885	FT 4840	FT 5635	FT 6175	DC 6575	DC 7600	
AWA2103.1		FT 4852.5	FT 5660	LP 6187	DC 6572	DC 7700	
FT 2280	FT 4025	L 4870	FT 5665	LP 6210	LP 6583	FT 7750	
DC 2336.4	FT 4035	FT 4880	DC 5700	FT 6225	LP 6540	DC 7810	
DC 2338	FT 4080	FT 4895	FT 5705	FT 6235	DC 6550	DC 7890	
DC 2338	L 4095	FT 4930	DC 5710	LP 6235	FT 6550	LP 7900	
DC 2338.05	FT 4124	FT 4950	DC 5710	DC 6240	DC 6700	DC 7920	
DC 2368	FT 4240	FT 4965	FT 5725	DC 6243	LP 6700	DC 7925	
AWA2442.5	FT 4255	FT 4985	FT 5740	LP 6243	DC 6750	DC 7925	
DC 2595	FT 4280		FT 5744	LP 6317	DC 6783	DC 7925	
DC 2665	L 4285	AWA5161.5	DC 5770	FT 6333.3	FT 6900	LP 7930	
	FT 4285	DC 5170	FT 5772	DC 6350	LP 6910	DC 7997	
AWA2030	FT 4360	FT 5180	FT 5775	FT 6350	LP 6910		
DC 3085	L 4366.7	FT 5205	FT 5780	LP 6350	LP 6940	DC 8080	
FT 5184	FT 4397.5	DC 5210	FT 5782.5	FT 6373.33	FT 6960	DC 8126	
FT 5195	FT 4397.5	FT 5245	DC 5810	FT 6375		LP 8155	
DC 3266.25	FT 4445	AWA5280	FT 5815	FT 6400.000	LP 7010	DC 8161	
DC 3287.5	FT 4480	DC 5285	DC 5840	FT 6406.607	LP 7060	DC 8171	
DC 3313.5	DC 4485	FT 5295	FT 5850	DC 6420	DC 7062	DC 8178	
L 3320	FT 4495	FT 5327.5	FT 5855	DC 6423	FT 7077	DC 8182	
DC 3332.5	FT 4520	FT 5360	L 5897.3	FT 6440	DC 7120	LP 8195	
FT 3840	FT 4540	FT 5385	FT 5910	DC 6450	LP 7120	FT 8270	
L 3432.5	DC 4549.44	FT 5397	L 5910	DC 6450	LP 7130	DC 8284	
DC 3440	FT 4580	DC 5410	FT 5920	LP 6450	DC 7200	DC 8350	
AWA3450	FT 4620	FT 5410	DC 5950	LP 6470	FT 7200	DC 8353	
L 3460.5	DC 4680	FT 5435		FT 6473.333	LP 7250	DC 8392	
L 3487.5	FT 4672.76	FT 5437.5	DC 6032	LP 6480	DC 7270	DC 8440	
DC 3488.5	FT 4735	DC 5515	DC 6040	FT 6506.607	LP 7270	DC 8630	
						DC 8751	

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Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

Editor "A.R." Dear Sir,

I enjoyed the description of the AFJRI in April "A.R.", however realizing that it is the fashion nowadays for manufacturers to let the customer select the product, I have decided to wait for "next year's model" before placing my order.

Also in April "A.R." was a statement made by the Editor to a "portly gentleman" to the effect that the yearly fee for an Amateur Station licence could not be paid at any Post Office. If this was made in an attempt to outpace the Publications Committee, then it was done in very poor taste.

In actual fact, I have paid my fee locally several times and have been advised by the appropriate authorities that payment can be made at any money order office.

I believe that coloured trousers have been suggested for men in the latest fashion trends overseas. No doubt these will also include "rose petal pink".

—Max Riley, VK1ARZ.

MOBILE STATIONS—BEWARE!

Editor "A.R." Dear Sir,

I would like to draw the attention of all radio amateurs to the fact that the mobile which I have come across recently, it concerns chiefly mobile stations whose ranks are mounting daily and it was while I was operating 40 mhz mobile that I recently during my annual vacation, that this potential danger impressed itself upon me.

It concerns the use of electric blasting caps to all the mobile stations that I have heard found most commonly along main roads and highways where road works, etc. are in operation and where mobile Amateur mobile stations are very likely to be found.

In N.B.W. it is customary for road signs to be exhibited in the vicinity of road works by means of a flashing light and these state "BLASTING—SWITCH ALL RADIO TRANSMITTERS OFF." Piqued by one of these signs, I inquired of the Dept. of Main Roads of New South Wales. They referred me to an article published in "The Explosives Engineer", of Sept.-Oct., 1961, wherein this matter is discussed rather fully and I would like to quote some of the relevant passages in order to familiarise Amateurs with the problem and so avoid unpleasant possible encounters with persons and Amateur Radio in this country.

"The wires of an electric blasting cap can act as an antenna and pick up radio energy and if the number of wires is just right, and the radio transmitter is close enough, the bridge wire in the cap can be heated sufficiently by the radio frequency current to explode the wires so that the cap can be exploded by the current made to be of the order of 0.25 amps or more."

The greatest danger arises when the two ends of the wire have a total length equal to one half wavelength with the cap in the middle. A series of ground leads at intervals of one half wavelength and the other is grounded close to the cap.

"It has been reported that an electric blasting cap exploded in the year 1958 as the result of a police car with a transmitter was exploded while the transmitter was operating."

"Experiments with a 100 watt Amateur Radio set was possible to shoot electric blasting caps 30 to 35 ft. below the horizontal antenna."

The article then goes on to suggest "the desirable minimum distance of separation between radio broadcasting transmitter and blasting operations." These include—

1. Input power between 8 and 20w.—100 ft.
 2. Input power between 30w and 100w.—300 ft.
- It is suggested also that "the electric antenna of the transmitter should be kept strictly turned off and preferably locked."

On reflecting these statements, one realises that a 33 ft. lead to one of these electric blasting caps could be a serious problem, and it happens to form a resonant half wave on 40 mhz, our commonest mobile band, with the cap situated at a current peak in the centre.

This condition holds too with lead lengths of odd multiples of 33 ft. which are even more likely to occur. The current necessary to set the cap off is also very little and, by way of comparison, it is similar in magnitude to the current in a small radio alarm.

So with these thoughts in mind, I suggest that Amateurs watch for any blasting signs which they be using their transmitters and that they at least, cut their carrier sharply until well past the potential danger zone.

—Clem Malool, VK1AMA.

ROSS HULL MEMORIAL V.H.F. CONTEST

Editor "A.R." Dear Sir,

We were interested to read the comments by David Rankin, VK3QV, regarding a proposed amendment to the rules of the contest.

We are in agreement with the general principles involved in the revised system of scoring, basing the points per contact on a distance basis, rather than on distance and intra-site contacts. An example of the inadequacy of the latter system is the following example from the 1960-61 Contest, Section C, 144 Mc. A contact from the South East of VK5 to VK7, a distance of approximately 450 miles, would earn the contestant 3 points. A contact by the same station, to a VK3 station located close to the VK3-VK5 border, say a distance of only 30 miles, would also gain the contestant 3 points. A system of scoring on the basis of distance does not provide much incentive for an operator to spend a lot of time during a Contest attempting to work a weak DX signal, when there is a number of strong stations available, but with the same number of scoring points per contact.

We therefore urge the adoption of the new scoring system, but with the following modification, viz., that scoring points be allowed for local contacts. There are two reasons for this.

1. To encourage a maximum amount of activity on all v.h.f. bands, e.g. a reference to the proposed scoring table for 144 Mc. shows that no points are allowed for contacts of less than 30 miles. This may discourage stations with simpler equipment from participating in the Contest. Don't forget that the fellow with simple equipment this year, may graduate to higher power, a larger antenna, higher frequency, etc. next year. It is a good idea to know the next year, provided his interest in v.h.f. is fostered by remembering his requirements during contests, etc. Not everyone participates in a contest with the object of winning it.

2. After some calculations on particulars supplied by various entrants in the Contest, it is felt that a metropolitan and a country station with similar equipment would have a more or less equal chance of winning the Contest. Local contacts counted for scoring points. VK-5AW will be happy to discuss this point with anyone interested, either on 7 or 144 Mc.

In view of these comments, a suggested modification to the scoring table follows—

Distance Between Stations	Points per Contact					
	30	40	50	60	70	80
Up to 10 miles	3	3	3	3	3	3
Over 10 and up to 25 miles	1	1	1	1	1	1
" 25 " " 50 "	1	1	1	1	1	1
" 50 " " 100 "	1	1	1	1	1	1
" 100 " " 200 "	1	1	1	1	1	1
" 200 " " 300 "	1	1	1	1	1	1
" 300 " " 500 "	1	1	1	1	1	1
" 500 " " 1000 "	1	1	1	1	1	1
" 1000 " " 5000 "	1	1	1	1	1	1
Greater than 5000 "	1	1	1	1	1	1

As a final comment, the suggestion of a contestant choosing one week from an operating period of six weeks seems a good idea. Let's have some more comments from those interested, to enable the rules to be modified in time for the 1961-62 Contest.

D. A. Carberry, VK5AW.

A. C. Rechner, VK3CZ/T.

Editor "A.R." Dear Sir,

With reference to the letter from VK3QV published in April "A.R.", I would like to join David Rankin in expressing my appreciation of v.h.f. activity. I must admit I have no clear-cut views on whether the Ross Hull Memorial Contest, in particular, should be a contest of a kind size convention, or an all-out battle of technical skills. I am sure however that points will be scored in any contest by the use of a quick and accurate log, and even the indefatigable JARRZ will not take himself into a state of post contest shock by working long hours if an easier method exists.

Unfortunately I cannot see a scoring system which increasing v.h.f. activity is present, because a scoring point is only needed to offset the great number of stations on 50 Mc, and 144 Mc. I feel that a drive on or twice a year is not sufficient to make it so that this should be current throughout the year. Every field day, scramble, convention, and even club events could have a 250 Mc. section, but a major honor or prize is necessary to make up for any lack of pride in personal achievement.

A scoring table such as suggested by VK3QV would certainly be a step in the right direction, although I would be inclined to allot even more points to the 250 Mc. band than to 144 Mc. This in itself would only be effective if a reasonable number of stations was operating, but it could be the incentive needed to overcome the amazing lack of 250 Mc. activity noted by the writer this v.h.f. year, and may offer some encouragement to those building equipment for higher frequencies.

I would not try to discourage the contestant who is sufficiently keen to spend a lot of time in a contest but there is no doubt that more interesting competition would result if country and DX stations worked, resulted in more points. This would be of great benefit to those who live at a distance from the coast and would bring about a reciprocal reward.

The need for some consideration here is indicated by the relative few who have worked 250 Mc. in the 1960-61 Contest. In 1960-61, 234 VK contacts during the last v.h.f. and Ross Hull Memorial Contests. It just wasn't worth the effort to get 3 points as far as the Contest was concerned.

I hope that these comments will help and not hinder the good people who spend so much time organising the Contest.

—Richard J. Highway, VK1ABK.

★

VHF NOTES

(Continued from Page 11)

over QBB was very noticeable. The 144 Mc. signals were also of a varying nature, but were not as strong as on most occasions. 250 Mc. was not successful, but Don 6ZAV thinks he heard their carrier but could not be certain. Steve Kevin, VK3QV, was very comfortable in windy conditions, but were very comfortable in Kevin's caravan which is also his shack. Power was drawn from a battery charged with a petrol generator.—DJB.

TASMANIA

The March meeting of the V.H.f. Group consisted of a visit to the new ARB on Mount Wellington. I guess we were lucky to catch a night with the temperature above (but only just) freezing point. We received an excellent discourse on the gear in use. A brief search on the way out made sure their supplies were kept normal.

Incidentally, the combine "Waddy Associates," presumed to be under the control of David TZAI, will have to come under close scrutiny if some of its disposal methods are as good as those of the "Waddy Associates."

We believe that Ted Evans, 7TJ, has gear capable of operating at 1215 Mc. and is interested in making use of it.

Nothing at all to report DX-wise apart from the VK5 sign on April 8. Local activity, however, is quite good. Phillip TZAX surprised every one with his new modulator circuit. Steve Kevin, VK3QV, was very "eror." At least we were well prepared for it!

144 Mc.—Most efforts are being concentrated on the 144 Mc. band. It is a pity that the antenna, TZAI seems to be engineering a massive system to be lodged on a new tower. TZBE has increased power and antenna size and has been successful in working 144 Mc. to power. Also building gear is Ted 7TJ.

When all this is finished we hope to arrange a visit with our colleagues from New South West Tasmania, and in the near future, want to be able to announce that we have "scaled" the mountains.

Another plan being investigated is that of a passive repeater installed on Mount Wellington. Our researchers are at present gleaning local radio signals and are planning to build a passive repeater.

Another project we hope to pursue is to organise, as a club project, the construction of a number of 2 mhz receivers by members. These have been built on a number of portable rigs which could be used by the Institute.

Finally—Still rather dormant but providing an excellent medium for "high level" rag-chewing. TZAU was recently heard 5 x 7 by TZAO/P at Carillon—reflecting signals off Mt. Wellington. TZAD.

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Dr. L. H. McMahon, VK3AK
Mr. B. H. Anderson, VK3AND

Victoria:

Mr. R. A. C. Anderson, VK3WY.
Mr. P. F. O'Dwyer, VK3OP
Mr. N. L. Storek, VK3ZO

Queensland:

Mr. S. R. Baxter, VK4YL
Mr. K. D. M. Grace, VK4BD
Mr. D. H. Hughes, VK4ZBD
Mr. L. E. H. Mallinson, VK4LM
Mr. C. I. Patterson, VK4YP
Mr. R. R. Baxter, VK4PR

South Australia:

Mr. A. R. Anderson, VK2GM.
Mr. G. S. Coombe, VK3ML
Mr. J. R. S. Coombe, VK3MR/T.
Mr. G. H. Herden, VK3ZFM.
Mr. W. D. Randall, VK3VR.
Mr. K. M. King, VK3KJL

Western Australia:

Mr. R. Chamberlain, VK6ZBZ.
Mr. W. E. Coxon, VK6AG
Mr. L. B. Eddington, VK6LS
Mr. J. J. Howie, VK6ZAA
Mr. C. J. Sanger, VK6CS
Mr. B. J. Stewart, VK6ZAS

Tasmania:

Mr. E. J. Cruise, VK7EJ
Mr. F. J. Evans, VK7EJ
Mr. K. A. Johnston, VK7BX.
Mr. F. E. Nicholls, VK7RY.
Mr. L. A. Nichols, VK7ZBN.
Mr. N. M. Nibbel, VK7ZBN.

The above-mentioned have indicated that they have no objection to publication in the Institute's magazine, "A.R.", of information that they members of the Amateur Advisory Committee.

The membership of the New South Wales Committee is incomplete, three having indicated that they do not desire publication of information that they are members of the Committee.

FEDERAL QSL BUREAU

Mems in Victoria and South Australia were surprised and delighted during early April, by a flying visit from "Dud", Chairman, QACJ "Dud", who is a Past President of the R.S.G.B. and well known to Australians since 1935, had a riotous time in VK3 and spent the Easter week-end in Melbourne renewing and cementing old air friendships. Complete with the cut size with which we always associate him, "Dud" seemed to enjoy his hurried visit to VK. Come again, "Dud" and stay longer.

The 1961 P.A.C.C. Contest of the V.E.R.O.N. (Netherlands) during April was again spoiled—in VK—by the failure to give sufficient advance notice of the Contest. For those who did make contacts, logs should be sent to P.A.V.R., Contest Manager V.E.R.O.N., Keizerstraat 54, Gouda, Netherlands, by June 18.

—Ray Jones, VK3EJ, Manager.

FEDERAL AWARDS

D.X.C.C.: The Mail Federation (TFM) comprising areas previously known as Senegal and Fr Sudan was formed as from 26/5/60 and given separate D.X.C.C. Listing in "A.R."

SILENT KEY

It is with deep regret that we record the passing of:—

VK2HP—Harold Peterson.
VK6WD—Francis Duns.

Sept. '60. After a short period this Federation changed to Senegal Republic and Mail Republic (formerly Fr. Sudan). Both areas will now be given separate D.X.C.C. Listing as from 26/5/60.

Kallingsberg Region (UA3), situated on the Baltic Sea between Poland and Lithuania, is a part of European R.S.P.R. from which it is sufficiently removed to warrant separate listing as outlined in "A.R.", Oct. '60, page 26, for any post-war contacts.

Amend D.X.C.C. Countries List published in "A.R.", Jan. '61, accordingly:
38 Mo. W.A.S.: Congratulations to Bill Wehr, 96 Mo. W.A.S.: Congratulations to H. Blythe, VK3ZEL who has been issued Award No. 21 with the addition of Papua, New Zealand and Japan.

W.A.V.E.C.A.: Further Awards No. 148-155 were issued during January-February '61 to WILLI, WITVO, W80MC, W4BYD, K8CQM, WCPFT, WITVO, W4LE, W80BY, ZL4CC, K8CPR and K8RACU.

Alf Klimick, VK3EB, Awards Manager.

NEW SOUTH WALES

Unfortunately, owing to an error of judgment I did not get the March notes away on the due date, but hope that they will be acceptable to members else at the time.

Anyone who may complain of any inactivity in the Division must indeed be hard to please, for I think that at no stage in our history have we had so much information on the many phases of Amateur Radio. For some months past we have two meetings each month at which lectures and demonstrations are taken place.

Each month we have the general meeting held normally at Science House, Gloucester Street, Sydney; the meeting held on the fourth Friday of each month and commencing at 8 p.m. On the second Friday of the month an additional meeting is held at our headquarters, 41 Atchison St. (Peters Nest), which is 100 yards from St. Leonards Station, and also very close to transport from the city and suburbs.

Unfortunately, for some months, neither of these meetings has received the support they deserve, surely a fine way of showing appreciation of the work done by those who spend so much time in planning on behalf of our members, and who are assured of an interesting and informative evening.

March activities commenced with the mid-month meeting. Next where a novel evening was arranged by Harold 2AAH, who as Divisional Education Officer, has the task of making the evening as interesting as possible in the form of a quiz session, but with a difference, in that the audience asked the questions which were capable dealt with by Harold. This developed into something of great interest and as the subject was "Antennae" the questions were many and varied.

As remarked previously, the attendance was not all that would be desired, but the keenness of those present made up for their lack of numbers. Further lectures are arranged for this informal gathering and members and their friends are encouraged to make a night of it. Full details of coming events are always featured in both the Bulletin and the weekly Messenger.

The March monthly general meeting was held on 24th March and again the attendance was not all that would be desired. The President, Bill 2XZ, took the chair and his proceedings welcomed the visitors: WASOMF, temporarily stranded in Sydney due to stoppage of aircraft schedules, P.K.A. and P.K.A.L. The President reported the untimely passing of Harold Peterson, VK3HP, for many years prominent in Institute affairs in this State, and members observed the customary one-minute silence.

Sixteen new members were admitted to membership for the month and the Secretary reported four resignations.

The lecture for the evening was one on a most interesting subject "The Science of the forecasting of Magnetic Storms" given by Mr. Cooke, of the Australian Prediction Service, who outlined the activities of the service, the difficulties they encounter and the theory of Josephine Redwood. Mr. Cooke was also responsible for supplying to the Division the forecasts which are given in the broadcast each week, and which are used to such good effect by those of us who chase the elusive DX. He was assured at this meeting of the appreciation of members for this service to us.

A notice of motion was dealt with, regarding the use of frequency shift keying on all bands. The originator of the motion, Barry 2AAS, spoke of the desirability of using this mode

and after discussion a vote was taken which proved to be in favour of the motion.

Following further general business, the meeting closed for supper and the usual ragchew.

OPERATION PICNIC

"Operation Picnic" occurred on Saturday, 18th Feb., and was a picnic conducted by the Civil Defence Organisation in N.S.W. to check aspects of mass evacuation of Sydney subsequent to an attack. This exercise received much press, radio and T.V. publicity, operation of it on a national basis. Four convoys of cars carrying 700 persons left various areas of Sydney journeying through the Blue Mountains to Katoomba.

Radio communication was provided by 144 Mc. mobile stations of the Blue Mountains Search and the V.H.F. and T.V. country, operating along the route, reporting the time and location of the various convoys en route. These spottings were reported to Glenbrook, and to the main assembly point at the Katoomba Showground, where announcements were made over the public address amplifier as to the position of the various convoys.

Mobile stations in the field were Bill 2BXZ at Emu Plains; Wal 2XZ and Harry 2HL at Glenbrook; Bob 2ASZ at Linden; John 2JFJ at Wentworth Falls; Dick 2ZCF at Katoomba. The Blue Mountains Search home base, 2APU, was located at the Katoomba Showground and acted as control station, with operators Dave 2XKX and Norm 2QKX. Over 200 amateurs assisted in the exercise in various capacities.

The net operated most effectively despite the difficult terrain and signals were very good at most times. The 700 visitors were provided with morning tea at Glenbrook and lunch at Katoomba by the Blue Mountains Civil Defence Section.

Divisional Council thanks all those who participated in the day's operations for their efforts, and the Civil Defence Controller for the Blue Mountains, C. A. Strachan, was more than pleased with the performance of the radio communications network.

ANNUAL MEETING

The Annual Meeting of the Division was held at Science House, Gloucester St., Sydney, on 24th March, at which the attendance, though adequate, was, to say the least, disappointing.

The Retiring President took the chair at 8.3 p.m., receiving apologies for non-attendance from VKs 2APQ, 2AGH, 2TI and Barney Smythe. Following the reading of the minutes of the previous Annual Meeting and their adoption, the Returning Officer was appointed, Dave 2EO, who, with the assistance of a team of scrutineers, attended to the counting of the votes at the last meeting of Divisional Council for the ensuing year.

A record number of ballot papers were returned, 401, of which 18 proved to be informal. The successful councillors are N. Beard, 2ALJ; W. Lewis, 2VB; H. Burlich, 2AAH; M. Pfeffer,

W.I.A. D.X.C.C.

Listed below are the highest twelve members of each section. New members and those whose totals have been amended will also be shown.

PHONE

Call	Cer. Cnt.	Nov. rise	Call	Cer. Cnt.	Nov. rise
VK8RU	2	251	VK6KV	4	202
VK8MK	43	245	VK4WR	1	126
VK3EJ	15	237	VK3ZL	2	103
VK4FJ	21	231	VK3GB	50	171
VK3WL	14	211	VK4RW	23	164
VK3ATN	36	204	VK3EE	10	163

C.W.

Call	Cer. Cnt.	Nov. rise	Call	Cer. Cnt.	Nov. rise
VK3EJ	10	387	VK4WR	1	251
VK3EJ	15	373	VK3XU	4	213
VK4FJ	29	364	VK7LZ	17	313
VK3IN	18	326	VK4RU	18	210
VK3EJ	6	223	VK3EJ	33	195

OPEN

Call	Cer. Cnt.	Nov. rise	Call	Cer. Cnt.	Nov. rise
VK3ACK	33	387	VK3EJ	33	223
VK4FJ	33	387	VK3GB	50	171
VK3EJ	8	365	VK3WL	43	223
VK3EJ	15	349	VK7LZ	23	323
VK3EJ	77	326	VK4XU	51	221
VK3EJ	7	223	VK3EJ	13	216

Amateur Radio, May, 1961

We'll, lots of things have been happening in VIC lately. I hope I can remember them all.

Firstly there were the balloon hunts, probably the most popular thing going on at the moment. The kids are very busy on this business lately, but a few facts for those who are in the dark. There were 6 balloons found by the kids, those who helped in the hunts a letter of thanks, and has given these points about the balloons:

The balloons were launched at Pikes Creek Reservoir, at 1115 hrs, burst at 97,000 ft over Williamson's station, and were seen by the Officer at 1600 hrs approx., where it was recovered by SADV and party in their mobile car.

A total of \$381 Mc was received from 1235 hrs till 1600 hrs, and payments were received from as far away as Melbourne, Warrnambool, Geelong, Bendigo and Wangaratta.

The d.f. bearings were, on the whole, accurate, the main troubles being (a) bearings were taken at odd times and could not be correlated with others taken five minutes later; (b) some bearings were given from magnetic north, others from grid north (preferred), but often neither was specified; (c) grid reference of some d.f. QTHs was not known at the plotting centre and could have accounted for some of the errors.

However, the exercise has shown that the frequency and power used are suitable for balloon recovery anywhere in the State, and Dr Hopper and his co-workers are delighted with its effectiveness.

After this performance, during which relations such as JKR helped a great deal in releasing another trial was arranged for Sunday. The trial was held at the same place as the JADW and folks gun, get it" careering about the country chasing elusive balloons. JADW/MACG beat them to it this time because JADW/MACG was making a roaring noise and the local people Yarra in the last stages. Anyway, MacG says that they were ruled out by the stewards earlier because they had the thing in visual contact. MacG says that he was not sure if he was clear the day the balloons were very clearly discernable at 60,000 ft. Geelong and district boys were very active on this day too, but the balloon drifted to the south and was not seen. MacG says that he was on his d.f. too, eventually made the kill.

SWI was on 40 mm, operated by Dave SQV, Jack SCS, and Alan SAEI. John SAKJ was on 3755 kc relaying the plots from the Laveau. The 3755 kc was a 1000 watt transmitter. I was talking to myself all day). The fun was on 40 when everyone and his dog seemed to call in to SWI with information about the weather. The balloon broadcasts, the information, the weather, and the people who enjoyed it all, and achieved some good publicity even on the t.v. A full account of the balloon project will appear shortly in "A.R." I do not know if there are people to thank, all those who have shown an interest in while not being directly concerned

Remember the last Dinner? Had come to you if you don't; anyway, this year the State Convention is to be held in Melbourne, and promises to be a beauty! It will be held on 30th September and 1st October, and the scheme seems to be that on the Saturday afternoon a conference room at Scott's Hotel will be used for Convention business, followed in the evening by the Annual Dinner at Scott's; remember last year's?

Anyway, we will probably only be able to accommodate about 250 people, so when you receive further details about the Convention and Dinner, don't hesitate in replying with the necessary info. and cash promptly

On the Sunday, a day in the country will be held with all sorts of activities designed to make the whole week-end a memorable one. Doug Bowie, and Michael Owen are organising the show and it'll be a beaut! Remember the last Dinner? Yeah, well you won't forget this year's I'll bet! We would like a very big representation from the Country Zones so please organise a party from your neck of the woods, or bush or what-all.

We do have a library, it's at the rooms, and we are very pleased to announce that Tom SZYQ has agreed to take on the job of librarian as soon as the building is finished. It should be well on the way by the time you read this, as work was started last month.

At the Annual General Meeting, held last month, David BADW, our President, gave his report. I started to take notes, but the report was so lengthy and detailed that I gave up.

however, it is being sent to all members. When you get it read it very carefully and critically, and I've no doubt that you will come to the same conclusion that I have—that is that this past year has certainly been a year of effort, of achievement, of hard work by our Divisional Council. I feel that Council the office-bearers, and all others who have helped are to be sincerely congratulated on the fine achievement of the past year. Not the least, our Secretary, Michael ZEO, and our Treasurer, David ZEO, and our President, David IADW should be singled out for a special word of praise and thanks.

Maybe some corns have been trodden on, probably this is unavoidable when people are tramping along with a single-mindedness and devotion to duty as they all were. The Institute and the Amateur Service, as a whole have benefited I am sure from the combined efforts of the large band of workers, and their leaders, who have worked for us in the past year.

They are still there in office. Office-bearers for 1961 are as follows: President, D. Wardlaw, LADW. Vice President, A. Elliott, 3AEL. Secretary, M. Owen, 1ZEO. Treasurer, K. Roget, FYQ. Alan Elliott is also our Federal Councilor for 1961-2. We are glad they are still there, give them the support you did last year and we're in for a further good year.

The P.M.G. Dept. advises that examinations for the Amateur Limited Licences will be held in future on the third Tuesday in January, April, July and October, and that the closing date is the 32nd of the month preceeding that in which the examination will be held.

We have a supply of the new badges, smaller and neater than the old ones, 3/- from the Secretary.

Be very careful about gear that may be offered to you, especially 382 tx and an Astor car radio converted for 1725 kc. These were stolen from the Elwood Life Saving Club's launch recently, after some of our members had spent a lot of time installing them. Has anyone some surplus gear that we could give them to replace this? This is a worthwhile cause, and we'd like to help. If you can help with a tx or rx suitable for conversion and installation in a rescue launch let's know.

Let me have bills for this section of the notes, please. I'm not able to be on all bands every night because of my work, but I try to get on 80 mhz on Thursday evenings; if not, please drop me a line. I can't make the news, only report it. Still, I've a few bits.

Noel 3ANS wrote me a very nice letter in March. It was unfortunately too late for inclusion in April "A.R." but we can welcome his news this month. Noel is up at Wanganui, having moved from Denilquin (ex-20U) and is on 40 each night from 7.30-7.40. He tells me that he has 40 and 80 mx gear going, and will get on 2 mx soon. He's brought his tower with him and intends to stay in Wang and so he has 10 over 10, 60 ft. up. He will have some activity on 20, 60 ft. up. He and Bruce 3QC organised a "Ham Stand" at the local Hobbies Exhibition and worked 40 and 80 mx.

• Please pay your Subscriptions PROMPTLY when due. Failure to do so may result in the loss of valuable issues of "Amateur Radio." High costs of production make it necessary to limit the number of extra copies printed each month.

Can you write an article for "Amateur Radio"? How about one for Hints and Kinks?

The Voice of the Alps, Arthur JAUL, has been in Chiltern during last month, and we've heard many QSOs on 80 in the evenings, with blokes picking him about his motor-bike. Don't let them worry you, Arthur, I had a two-banger for years, and it's cheaper than a car, but one thing I'd like to know—why don't you turn it into a single-sidesaddle lineer! I know, I know, you don't have to tell me!

Ten metres has been a picnic ever since Easter. Signals coming in loud and clear from all corners of the globe. I worked DX stations from my first DX 10 over that time, a ZL. However other stations were more fortunate and VKs were heard in QSO with DX stations all day and night during Easter. While we are talking about DX, VK0JC has just returned from the Antarctic and would like 3WC to contact him at his home address.

Two Zone Conventions were held in April, the S.W. Zone and the Eastern Zone. Could we please have details for June "A.R." by the 8th of this month, fellers?

Jack SAPL is reported to be much better. he's up and about but has to return to hospital for further treatment. We wish him all the best for a complete recovery. Chin up, Jack. we're all thinking of you and looking forward to your return to the bands.

Bob JUW is busy building a s.a.b. rig and a
mx rig based on Melbourne Morton LANG
is also saving up for a s.a.b. rig. GRIB on
Sarawa is an ex-VK3 on VKO (Macquarie
Island). He operates 80 mx phone and 40
s.m.u. is looking for VK3 contacts, especially
LATA. He has not heard Trevor around and
is looking on 14.3 Mc. on Sunday nights or
Monday nights 1000 hrs. GMT.
T.A. VIKARI, world's best, let him have

The Zone Convention has been arranged in Warrnambool on 29th and 30th April. The local committee have arranged a full programme of events commencing with the dinner at the Caledonian Hotel at 1830 hours. The Annual Zone meeting will be held at 1430 hrs on 29th, thus clearing the evening for a night's entertainment. See you there? Bookings are to the capable hand of Edie FANNO.

Bill 3XE has treated himself to a new type X power supply and it is rumoured has plans to eliminate his carrier some day. Why though Bill? What about eliminating the sidebands instead? Judging by the test equipment being built there, something must be brewing. Latest one is a new g.d.o. which puts out a quite good signal for its 0.6 watt on 80 mhz.

Latest Zodi station to adopt the break-in and c.w. is Eric 3XL who, after some initial troubles, has persuaded the v.f.o. to key quite nicely. Look out you commercials now! Eric reports that four members of the Geelong Club have been successful in passing the A.O.L.C.P. exam, and one, Harry, the Club President, has managed the A.O.C.P. Congratulations chap!

From Thorb 3AP8 comes news of two A.W.s. in his district. Both are members of the VL-NC net and keen listeners on 60 and 80 mhz. They are Fred Rousefield and Jack Murphy, and both will be sitting this month for the A.O.L.C.P. Thorb has brushed the dust off the old code oscillator as both have their sights on the code exam later. Good luck to both of you! Thorb has been putting his ground plane antenna to work on 80 mhz.

Way up in the DX ratings is Norman 3NC. Just as a reminder that power input is not the be-all and end-all, Norm's 240 odd countries were made using 6 volt batteries and a F56 power supply input on o.w. is 8w, and on phone 4w. Antenna system was an umbrella of 500 ft. vee beams, but now is 87K beams. The shack is in a good spot certainly, but to work G land on 20 mx phone is no mean feat indeed.

His 3KX's comes report from that old master of 80 X's Claude ZL1C of hearing a mobile contact from this location one Sundae afternoon. Phone was R3 there and also R3 at Gratus in VK1. However after a night out with 3KXN, both of us called CQ, CQ DX and the mobile station said they were not interested to get a brush off from a ZL station who decided to call his mate on sked on the channel. Brian 3KXN is going QRO with the mobile by using four adapted 80's in a grounded grid lines circuit using an asbestos loading coil. Brian is a hard working man and a genuine gem from NSW with much better results.

We are sorry to learn that Bill ZHU has not been well and the Zone hopes that you have long since "recovered" Bill and back on the bands again.

Jamie EMC, who specializes in signals from space, has been reporting signals from balloons from Midura and other places. Jamie has been having receiving troubles and is looking



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NOTE: A New Ballantine Laboratory Standard device will be released later this month . . . The model 393 HF Transfer Voltmeter. Write for further details.

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at will in the complete confusion of a certain bike, but it's very good. Tom, and should be an inspiration to others to do the same. Like it sideband best at this QTH.

Arch 5XK has given Ham Radio a boost in his ham making available to E.P.S. his whole station as a stand-in when a breakdown put their gear out of action. Good work Arch and his crew. Let's keep it going.

Athol 5LQ, that noisy type at all our meetings, decided recently to come down with the peasants on 40 and talk to Les 5AX. Nice. Athol 5LQ, good work. I wish to be true and did you get the HXO afterwards or was it a SSZ? The pile-up was great, but think your patience greater.

Les 5AX has a new mobile rig finishing with a 846 link coupled to the loaded whip, and on 30. The rig radiates a clear class signal with plenty of r.f. and audio. Of course the front end of the car has changed somewhat to make room for this, with a consequent reduction in room for his patient.

Remember the most publicised water pump in Aust.—the one outside Les' shack! Well, it's now painted a bright blue. Blue water haxil lance. DXL continues to come up on the frequency, his 5 x 9 signal penetrates well. Joe 5JO portable at Currency Creek with a Type 41 in a 5 x 4 here, no trouble at all. Have you ever heard a phone man with nearly no voice at all? Listen then to Stewart 3MS who has voice trouble at present. Stewart 3MS who you recently Stewart, and it's getting better, so hope progress continues. Ray 5BT, the latest to dispense with a carrier, has heard on 40, trying this and that in position A, position B and so on. Keep it up Ray and then next step make the plunger and filter one of them out altogether. At the moment it sounds a bit "carbon mike" but you will get it right.

Quite a lot of fellows have had a spot of trouble getting the bugs out of a commercial v.f.o. unit, some not over successful; well two fellows have done a good job. Les 5AX in his mobile rig and he has succeeded in getting it up soon; the other one is Keith 5ZY, who is putting out the clearest signal heard here from any of them. Congrats fellows, you will get many enquiries.

The SWI Sunday session, as conducted by Keith, continues to draw its admirers. The odd bit he gets into the news and topics of visiting Ham celebrities all helps the interest. The country boys really thank you Keith for the effort you put into it, and also for the painstaking way you answer their queries even if research is required.

Joe 5JO and Arthur 5BY heard recently, because of an indiscretion at Shep EDC's QTH, the use of an advantage of a.b. Keep at them Shep for feel sure after the demonstration they were given and the ease with which they absorbed the information that they have those two as converts in no time at all.

Charlie 5ON and Arthur 5BY heard on 40 recently announcing their first contact in 47 years. My fellows, you the bands more frequently than that please!

Had intended to make quite a plug for a new book, but the noise of the bands stole my thunder in the splendid Editorial and the article series commenced by "VOX" on page 5.

VK3 has Bram 5AB, Phil 5NN, Clive 5PE, Tom 5AQ, Reg 5QR, Shep 5DC, Burnie 5WC, and yours truly on a.s.b., and Reg 5HR, Doug 5KX, and 5ET. I don't know if this is the first step, and with three other rather prominent VK3s soon to appear on a.s.b. So as far as this State is concerned it's catching on and proportionately we are up to the other States.

Congratulations to "A.R." for its scoop on the Trade Review of the AFRLI. Recently not often we get the inside story of such a brilliant development. Sorry you missed out on the really interesting ascerascence of the unit, for which there is a Power Mallet provided, that is the changeover assembly for send/receive. It is a little known necessary that by removal of the assembly the receiver into a transmitter to provide a true transceiver. Think the name given to that gadget is inadequate. . . . I spell (no, perhaps I had better not).

Up the wall! —5EF.

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TASMANIA

The Annual General Meeting for the year 1961 was held in Hobart on 25th March, followed by a most successful annual dinner, attended for the first time by lady guests. It was very pleasant to see so many members and their ladies from the other Zones.

The election for Council resulted in the following being elected: Tom TAL, Ken YKA, Len TLE, Alan TMY, Doug TDW, Charles TCH and myself TZZ. Officers will be elected by Council at the next Council meeting. Many other positions were filled at the same time. GSI, Manager, TZZ, Divisional Officer, JRG, Assistant Broadcast Officer, VKS; Lecture Organiser, TLE; V.h.f. Auditor, TMY; Traffic Officer, TOM; and Auditors, TGR and TLI.

About 75 people attended the truly excellent dinner, and we all enjoyed the evening to follow. During the course of the evening certain money raising ventures were undertaken, and I wish to state publicly that the two prizes won by the wife of a certain R.I. visitor were honestly gained and that the organisers did not in any way contemplate immunity or favoured treatment should any of Departmental inspections of radio gear, even if that should be the result.

Our Division has had several visitors during March, including Al 5CE, Ken 5AFM, and Ted 5JE, as well as Peter 5AFO, Fred 5AFC, and 5AFC for VK3, whom we welcomed to our March Council meeting.

Conditions for the B.E.R.U. Contest early in March were good, and we enjoyed the contest limited to VK and ZL stations. On the other hand, conditions for the A.R.L.I. c.w. contest late in that month were quite good, and I worked many stations almost all States. Snowy TCH was away twice on the yacht Moorina with his portable gear, and those stations who worked him mobile marine were again rewarded by excellent conditions on the 30 mc. band.

After the formal business at the April Divisional meeting, our members visited the studios of ABC channel 2 and were much interested and benefited by so doing. We are so glad that the P.M.G. has granted permission to re-broadcast a 50 Mc. transmission of v.h.f. notes from the 50 Mc. Sunday morning broadcast, 7.30, 12.00.

NORTH WESTERN ZONE

As this is my first effort, I will start at the finish and work backwards. Our last Zone meeting was quite a success. During the night was a screening of some colour slides, taken by George VK3AIH on his recent tour of Tasmania. The slides were very interesting, and thoughtful in sending the slides over, and congratulate him on his skill with the little black box.

We were pleased to learn that the gear designed and built by this Zone for the Burnie Fire Brigade is in action and doing fine service during our dry summer. Which reminds us of the Devonport Fire Brigade gear, also built by this Zone, has proven so successful over the past few years.

The last Tx Hunt was reviewed and voted a great success. The frantic dashing backwards and forwards by so the hids are Tx 1775 and associate Alan Baptist by TDX caused considerable amusement. Six trips were counted and the result was a tie. The boys who hid the hidden boys held their breath while he went past. What is wrong with my d.f. gear?

VK3 7SF, 7TT, 7ZAA and 7ZAH went south to the annual meeting and dinner of the VK3 Division and voted it a most successful success. Apparently the inclusion of the ladies at this year's function did much to brighten the evening.

Heard that Sid is now the proud possessor of a 154 tx. Bob turned up the other night with a very interesting looking shiny box with bits and pieces sticking out. It proved to be a walking radio. I voted it a most interesting gadget. Turn up the gain, you VK3 boys. You could hear 7ZAA. We are anxiously waiting to hear Ken radiating his first signal. I voted it up Ken. TXL now up as a business-like looking whip on the Holden and appears to have the 123 working nicely. Quite a collection of mobile gear was shown at the last tx hunt, including 7TT and 7SF.

7MS has a long wire, in fact a very long wire. Understand it started out at about a 100 ft. but it has been extended to about 120 ft. and is now about 20 m. As this is in the apple area suggest you watch for trouble David, if a hundredweight of starlings decide to roost at once.

We have had a number of visiting Amateurs passing through our Zone recently. Can recall VK3 SAHN, 3FM, 5ZCN, 5JE, 5KK, 2JR, and 5CE—all pleased to see them. Brings to mind the chap who landed from the ferry on Tuesday morning and booked his passage back same night. The idea was to have a quick look round Tasmania during the day. I.

Hope by the time TRL reads these notes he will be back in circulation again after the untimely accident. Best wishes to him.

Noticed Harold having a good personal QSO with a couple of VK3s recently. Apparently TME was getting some news from the old home town.

We look forward to some interesting meetings this year. The committee is cooking up some special dishes which we hope will improve our attendance.

We didn't realise, until the last meeting, that so many of our members were interested in photography, mainly colour transparencies. This offers some scope for future meetings, when possibly radio will have to take second place. And yet, I don't know, and yet . . . —TMX.

HAM ADS

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Advertisements under this heading will only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received at P.O. Box 34, East Melbourne, G3, Vic., by 8th of the month, and remittance must accompany the advertisement. Some scope for future material in Hamads. Dealers' advertisements not accepted in this column.

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WANTED: Urgently. Sub-Editor to continue writing the DX page in "A.R." John Pinnell (VK2ZR) has to relinquish this position due to the pressure of personal business. Please write to "A.R." or John Pinnell if you would be prepared to take on this task. Appointment would commence in June 1961. The usual fee for "A.R." Sub-Editors will be paid.



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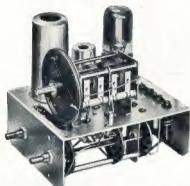
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